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## ABSTRACT OF THE DISCLOSURE

Flat panel liquid-crystal displays, such as for laptop computers. The displays include twisted nematic displays, supertwisted nematic displays, active matrix liquid-crystal displays, thin film transistor displays, and plasma addressed liquid-crystal displays. The displays are furnished with glass substrates. The glass substrates exhibit high resistance to thermal shock, a high transparency over a broad spectral range in the visible and ultra violet ranges and the glass being configured to be free of bubbles, knots, inclusions, streaks, and surface undulations, which glass substrates are made from alkalifree aluminoborosilicate glasses. There are also provided analogous thin-film photovoltaics.